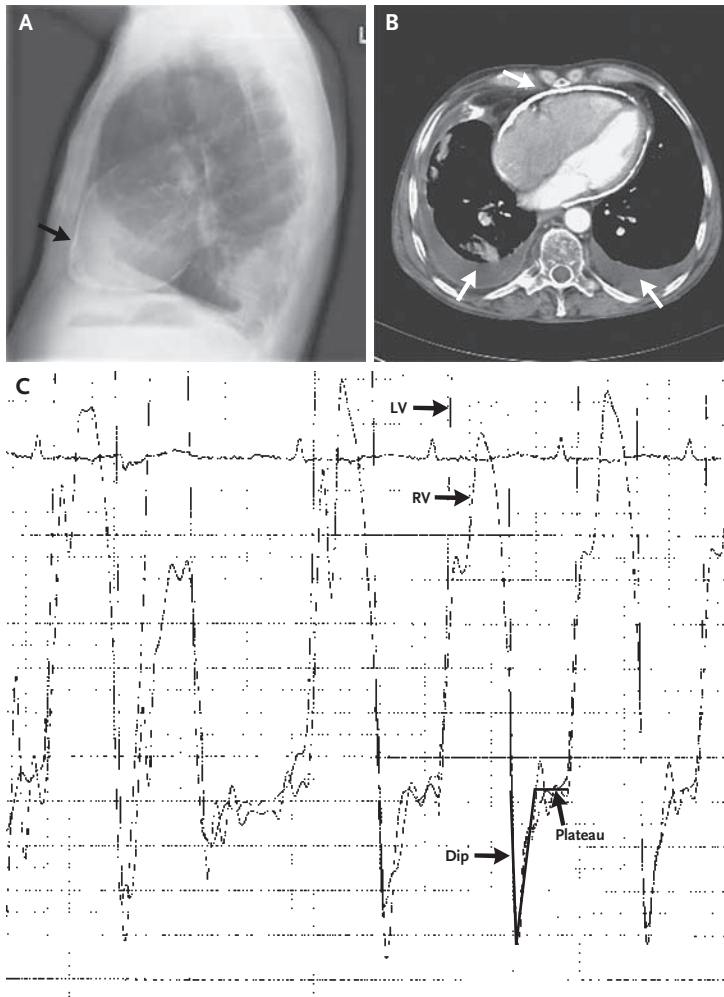


## IMAGES IN CLINICAL MEDICINE

## Cardiac Constriction Due to a Calcified Pericardium



Sven Mobius-Winkler, M.D.  
Claudia Walther, M.D.

University of Leipzig Heart Center  
04289 Leipzig, Germany  
sven.moes@medizin.uni-leipzig.de

**A** 66-YEAR-OLD MAN WAS EVALUATED FOR RECURRENT CARDIAC DECOMPENSATION AND A 2-YEAR HISTORY of worsening heart failure. Physical examination revealed distention of the jugular vein with Kussmaul's sign, spider nevi, and bilateral leg edema. New York Heart Association class IV heart failure was diagnosed. He had had pulmonary tuberculosis approximately 60 years earlier. Chest radiography revealed severe calcification of the pericardium (thickness, 6 mm) (arrow, Panel A), and computed tomography revealed bilateral pleural effusion (arrows, Panel B). Fluoroscopy and echocardiography confirmed the diagnosis of severe constrictive pericarditis with only a small anterior region of the pericardium free of calcification. Left ventricular systolic function was preserved. Hemodynamic measurement showed equalization of the diastolic pressure in all four chambers (left ventricle [LV]: systolic pressure, 98 mm Hg; early diastolic pressure, 0 mm Hg; and end diastolic pressure, 20 mm Hg; right ventricle [RV]: 53, 0, and 20 mm Hg, respectively; right atrium: 17, 15, and 14 mm Hg, respectively; and left atrium: A wave, 24 mm Hg; V wave, 27 mm Hg; mean, 16 mm Hg) with a typical "square-root configuration" of the blood pressure curve (Panel C). The patient underwent surgical pericardectomy, which resulted in immediate normalization of cardiac function. The calcified pericardium was presumed to be due to the childhood tuberculosis infection. The patient was discharged on postoperative day 33 and remained asymptomatic 1 year later.